Original/Duplicate/ Triplicate

SBR No 10H/18-19
DATED 19-2-19

CONTRACT CERTIFICATE

No.4[Th] & Final bill (For Other Works) Date.....2017

Division: **Electricals (Yelahanka)** Sub-Division: **Electricals** EE/ELE/Y/BR No.1HO/18-19

Bill Received No. Dated Divisional Cash Book Voucher No..... Dated... Dt.19-2-19

Sub Divisional **Job Code :-007-17-000033**

Schedule Docket No. Head of Account :**P 0287**(M&R to Electrical Crematorium)

D.R.No. :

Bill Period: **01-04-2018 to 31-10-201 (for 7 months)**

Name of Work : *Annuaal Maintenance of Electrical Equipments and Maintenance of Crematorium at Hebbaa Kempapura in Ward No 7"*

Name of Contractor and Full Address:**M/S S.B.E.S Electricals**

Reference to Agreement No:EE/Ele/YZ/WO/01 /17-18 Date:27/4/2017

Supplementary Work Order : EE/Ele/YZ/WO/000046 /18-19 Date :01-02-2019

Certified that the measurements were taken by me on 14/2/2019 and recorded of Pages 256315 to 319 of measurement Book No. 256H/18-19 and that the work is satisfactorily executed.

For S.B.E.S. ELECTRICALS

Contractor **Officer-in-charge of work**

Certified that the measurement were taken by me on 14/2/19 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Sub-Division Officer
Assistant Executive Engineer (Ele)
BBMP, Bangalore

II Memorandum of Payment

		Amount
1)	Total value of work done or supplies made as per account within	Bill= 459385=00
2)	Deduct amount to be held in reserve being .....percent Rs.....	IT 1% 4594=00
3)	" Balance	SCost 1% 4102=00
4)	Deduct Payment:	CCost 1% 4102=00
	a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... adjusted towards cash advance recovery of	LWC 1% 4594=00
		FSD 5% 22969=00
	b) Payments Now made } cost store or other material supplied. recovery of amount creditable to this/other work Amount paid on this bill Cheque / Cash.	CBFD 1% 460=00
		deductions= 40821=00
		Cheque= 418564=00
5)	Balance being unpaid value of work done held in reserve.	
6)	Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.	
7)	Net amount due to or from Contractor unadjustments items.	
8)	Advance to Contractor for materials brought to site (as detailed) within.	
9)	Value of Government materials supplied.	
	Total amount adjusted -	

For S.B.E.S. ELECTRICALS
Contractor's Signature

Received Rs..... (in words).....

.....

by cash and by adjustment of Payment as per memorandum

(in final settlement of all demands)

Proprietor

(For use in the Office)

Witness
1.
2.

For S.B.E.S. ELECTRICALS
Stamp
Proprietor

Dated Signature of Contractor

Paid by me by Cheque No.....Dated.....

Cash Rs.....Dated.....

Initials of Officer making payment

ಲೆಕ್ಕ ಶೀರ್ಷಿಕೆ P0287 M&R to Electrical ...

ರೂ:459385=00 ಆಡಿಟ್ ಮಾಡಿ ಸ್ವೀಕರಿಸಿದೆ

ರೂ:418564=00 ಚೆಕ್ ನೀಡಬಹುದಾಗಿ...

ರೂ:40821=00 ಹಿಂಪಡೆಯಲಾಗಿ ಮಾ...

Executive Engineer

ಲೆಕ್ಕ ಅಧೀಕ್ಷಕರು ಕಾ.ಪಾ.ಅ.(ವಿ) ಯಲಹಂಕ ವಲಯ

Sl no	Description of item	Unit
	Name of Work :Annuaal Maintenance of Electrical Equipments and Maintenance of Crematorium at Hebbala Kempapura Ward No 07	
1	Licenced electrician wiremen fitter with tools (Skilled) Rs.13365/Person/Month. Rs.13365*12=1,60,380/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person
2	a).Helper (Electrical) (Semi-Skilled) Rs.11011/Person/Month. Rs.11011*12=132132/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person
3	a).Sweeper (Unskilled) Rs.11011/Person/Month. Rs.11011*12=132132/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person
4	Gurkha Watchman (Unskilled) Rs.11011/Person/Month. Rs.11011*12=132132/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person
5	Material components per day a)soap oil	P/Ltrs
6	b)henyl	P/Ltrs
7	c)Air Freshner cakes	Each
8	d)Room Freshner	P/Ltrs
9	e)Checks cloth	Doz
10	f)Dust cloths	Doz
11	g)Mop cloth	Each
12	h)Soft broom	Each
13	i)Hard broom	Each
14	j)Road brush	Each
15	k)Urinal cakes	Each
16	l)HCL	P/Ltrs
17	Body Resting Bricks made out of Refractory to with stand. Temperature upto 1000c to the required shape as per BIS-8	Each
18	Supplying and fixing of heating element made out of nickel chromium 8/20, 8 SWG composition wire with SS 310, 450 x 10 mm dia. with one side threaded terminal rod duly welded, coil length 2690 mm, coil dia., 25 mm, weight of the coil 4.5 kg, coil of 0 to 25 mm ID 15 mm pitch to 8 to 10 mm (inclusive of KST, ST and CESS etc.	Each
19	Annual Maintenance of 180 KVA D.G. Set Existing A.M.C. including of labour charges only for replacing the spare parts and periodically checkup of D.G. AMF panel (Without operator)	Each
20	Supplying & Changing of B Check Kit for Engine.	Nos
21	Supplying & Changing of Alternator AVR.(Automatic Voltage Regulator)	Nos
22	Supplying & Changing of Alternator Rectifier	Nos
23	Supplying & Changing of Dynamo repair Kit such as Corbons, Bearings & Diode Etc,.	Nos
24	Supplying & Changing of Batery terminals	Nos
25	Supplying & Fixing of Air filter	Nos
26	Supplying & Changing of Radiator Fly wheel gear	Nos
27	Supplying of Switch disconnector fuse unit (TPN) HRC type (but without HRC fuses). With AC-23A duty and as per IS-13947. 2) 125Amps	Each
28	Supplying and fixing HRC fuse link on existing switch fuse base with watt loss as per IS-13703. 3) 125Amps	Each
29	Supplying & Changing of Cylinder head caliberation.(3 Nos)	Set

Previous		Present Measurement			Total Upto Date		Remarks
Qty.	Cost	Qty.	Rate	Amount	Qty	Cost	
1x11 Months	165000.00	1x7 Months	15000.00	105000.00	1x18 Months	270000.00	
1x11 Months	137500.00	1x7 Months	12500.00	87500.00	1x18 Months	225000.00	
1x11 Months	137500.00	1x7 Months	12500.00	87500.00	1x18 Months	225000.00	
80	800.00	74	10.00	740.00	154	1540.00	
114	5700.00	81	50.00	4050.00	195	9750.00	
165	1650.00	35	10.00	350.00	200	2000.00	
82	3280.00	26	40.00	1040.00	108	4320.00	
58	2900.00	59	50.00	2950.00	117	5850.00	
39	1950.00	15	50.00	750.00	54	2700.00	
27	1620.00	11	60.00	660.00	38	2280.00	
27	540.00	15	20.00	300.00	42	840.00	
27	270.00	9	10.00	90.00	36	360.00	
8	800.00	4	100.00	400.00	12	1200.00	
110	1100.00	39	10.00	390.00	149	1490.00	
27	675.00	9	25.00	225.00	36	900.00	
16	88000.00	0	5500.00	0.00	16	88000.00	
24	312000.00	0	13000.00	0.00	24	312000.00	
0	0.00	1	10000.00	10000.00	1	10000.00	
1	1000.00	1	1000.00	1000.00	2	2000.00	
0	0.00	1	10000.00	10000.00	1	10000.00	
0	0.00	1	10000.00	10000.00	1	10000.00	
2	10000.00	0	5000.00	0.00	2	10000.00	
2	2000.00	0	1000.00	0.00	2	2000.00	
0	0.00	1	500.00	500.00	1	500.00	
0	0.00	1	2000.00	2000.00	1	2000.00	
3	6000.00	0	2000.00	0.00	3	6000.00	
3	3750.00	0	1250.00	0.00	3	3750.00	
0	0.00	1	4000.00	4000.00	1	4000.00	

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3	a).Sweeper (Unskilled) Rs.11011/Person/Month. Rs.11011*12=132132/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person
4	Gurkha Watchman (Unskilled) Rs.11011/Person/Month. Rs.11011*12=132132/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person
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6	b)henyl	P/Ltrs
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8	d)Room Freshner	P/Ltrs
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10	f)Dust cloths	Doz
11	g)Mop cloth	Each
12	h)Soft broom	Each
13	i)Hard broom	Each
14	j)Road brush	Each
15	k)Urinal cakes	Each
16	l)HCL	P/Ltrs
17	Body Resting Bricks made out of Refractory to with stand. Temperature upto 1000c to the required shape as per BIS-8	Each
18	Supplying and fixing of heating element made out of nickel chromium 8/20, 8 SWG composition wire with SS 310, 450 x 10 mm dia. with one side threaded terminal rod duly welded, coil length 2690 mm, coil dia., 25 mm, weight of the coil 4.5 kg, coil of 0 to 25 mm ID 15 mm pitch to 8 to 10 mm (inclusive of KST, ST and CESS etc.	Each
19	Annual Maintenance of 180 KVA D.G. Set Existing A.M.C. including of labour charges only for replacing the spare parts and periodically checkup of D.G. AMF panel (Without operator)	Each
20	Supplying & Changing of B Check Kit for Engine.	Nos
21	Supplying & Changing of Alternator AVR.(Automatic Voltage Regulator)	Nos
22	Supplying & Changing of Alternator Rectifier	Nos
23	Supplying & Changing of Dynamo repair Kit such as Corbons, Bearings & Diode Etc,.	Nos
24	Supplying & Changing of Batery terminals	Nos
25	Supplying & Fixing of Air filter	Nos
26	Supplying & Changing of Radiator Fly wheel gear	Nos
27	Supplying of Switch disconnector fuse unit (TPN) HRC type (but without HRC fuses). With AC-23A duty and as per IS-13947. 2) 125Amps	Each
28	Supplying and fixing HRC fuse link on existing switch fuse base with watt loss as per IS-13703. 3) 125Amps	Each
29	Supplying & Changing of Cylinder head caliberation.(3 Nos)	Set

30	Supplying & Changing of Radiotor hose Kit (3 Nos)	Set
31	Supplying & Changing of Pump gasket	Nos
32	Supplying & Changing of Top cover gasket.	Nos
33	Servicing & cleaning of Scrubber, Scrubber duct Exhaust Blower & Duct Furnace to Chimny and cleaning of chimny (6 monts once)	P/Set
34	Accost - 50 Grade	Bag
35	Fire crate super	Bag
36	Thermotex	Bag
37	Fire blanket : 128 Grade	Each
38	IS 8 Standard Brick : Size : 9x4.5x3	Each
39	Plastic buckets 20 L capacity PWD Civil SR 2013-14	No
40	Plastic Mugs PWD Civil SR 2013-14	No
41	Point wiring using Copper wire with switch Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A Long point above 6Mtr upto 10Mtr from tapping point to out let via switch	Mtr
42	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper conductor single core wire in open or concealed system of wiring as per IS-694:1990 & confirming to GTP of GROUP -A.1.5 sqmm	Rmt
43	4)4 sqmm	P/Mtr
44	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board. GROUP A 6Amps SP Switch	Nos
45	6Amps 3 way 5 pin Socket	No
46	16 Amps SP switch	No
47	16 Amps 3 way 5 pin socket	Each
48	Stepped Fan Regulator.	Nos
49	LED Indoor Supplying of 2' feet - LED PVC Square Batten ..W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing defect working under standard electrical conditionLED light fighting 4' - 28 watts	Each
50	Supplying and fixing Moulded Case Circuit Breaker (MCCB) Over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of overload and short circuit with thermal Magnetic/Micro processed release and Earth Fault as per IS-13947. (Icu=Ics). FOUR POLE 6) 125-160Amps 25kA.	Each
51	Supplying and fixing of Shunt trip suitable for MCCB.CBCT.	Each
52	Supplying, installaion, testing & commis-sioning of 12Volts.. AH batteries in poly propylene container for D.G Sets low maintenance batteries. 4) 150 AH, Acid batteries.	Each
53	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 4) 100 Amps	Each
54	5) 200 Amps	Each
55	Supplying of 1440rpm heavy duty exhaust fan with bracket blades suitable to operate on 230V 50Hz, AC Supply complete. 2) 15" Sweep (450mm)	Each
56	Fixing one exhaust fan after making a suitable nitch in the wall and finishing with cement mortar and colouring to match the existing wall or brackets, with bolts and nuts and a 5 amps, ceiling rose with sufficient length of 23 / 0.0076 inch PVC insulated twin core wire of approved make with wire mesh and wooden frame.	Mtrs
57	Supplying and fixing of Alkathine tube of 25 mm dia as per standard technical specification	Each
58	Supplying and installation of RUBBER MAT 1 mt X 2mt 10 mm thick. PWD Electrical SR 2010-11	Each

1	1000.00	0	1000.00	0.00	1	1000.00	
1	500.00	0	500.00	0.00	1	500.00	
0	0.00	1	500.00	500.00	1	500.00	
3	45000.00	1	15000.00	15000.00	4	60000.00	
4	2400.00	0	600.00	0.00	4	2400.00	
2	2000.00	0	1000.00	0.00	2	2000.00	
2	2000.00	0	1000.00	0.00	2	2000.00	
3	1050.00	0	350.00	0.00	3	1050.00	
100	10000.00	0	100	0.00	100	10000.00	
4	800	0	200	0.00	4	800.00	
8	800.00	2	100	200.00	10	1000.00	
20	10000.00	0	500	0.00	20	10000.00	
91	910.00	0	10	0.00	91	910.00	
143	2860.00	0	20	0.00	143	2860.00	
20	3000.00	0	150	0.00	20	3000.00	
10	1000.00	0	100	0.00	10	1000.00	
5	750.00	0	150	0.00	5	750.00	
5	1000.00	0	200	0.00	5	1000.00	
5	2250.00	0	450	0.00	5	2250.00	
20	40000.00	0	2000	0.00	20	40000.00	
3	24150.00	0	8050	0.00	3	24150.00	
1	600.00	0	600	0.00	1	600.00	
1	20000.00	1	20000	20000.00	2	40000.00	
6	1200.00	0	200	0.00	6	1200.00	
6	3000.00	0	500	0.00	6	3000.00	
0	0.00	0	5000	0.00	0	0.00	
0	0.00	0	300	0.00	0	0.00	
8	8000.00	0	1000	0.00	8	8000.00	
2	3000.00	0	1500	0.00	2	3000.00	

59	Supplying and fixing of DANGER/NO ADMISSION/NO SMOKING board made out of MS sheet metal with two coats of non corrosive enameled paint. PWD Electrical SR 2007-08	Pair
60	Supplying of Rubber HAND GLOVES of Electrical quality to 22KV. PWD Electrical SR 2007-08	Each
61	Supplying of Safty MASK, PWD Electrical SR 2007-08	Each
62	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 220v A.C.50 Hz 12/24v D.C.	Each
63	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes 11) 95 sq mm long barrel	Each
64	15) 240 sq mm long barrel	Each
65	Supply and fixing of 4 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947. 4) 5)160-200Amps	Each
66	3) 60-70 amps	Each
67	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and Complete wiring as required confirming IEC 60898. 6) 40-63 Amps TPN	Each
68	3) 5-32Amps DP	Nos
69	Supplying of LED Floodlight with .....W System Power consumption pressure die cast aluminum housing with powder coating with IP 65 protection. 1, 200-275V voltage with electronic Driver, PF>0.9, should meet ANSI 2G Vibration test, Compliance to UL/CE with Class I. System rating shall be 50K hrs. @ Lumen maintenance of 70%, system efficacy > 80lm/w. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer.LED Floodlight 90W	Nos
	Total Rs	
	Less Excess Paid In 2nd RA Bill Item No 23 (1NoxRs5000= 5000.00)	
	Less Excess Paid In 2nd RA Bill Item No 43 (48Mtrsx20=960)	
	Total Rs	

Certificate: 1. Certefied that the Above Work has been carreid out satisfactorily

Assistant Executive Engineer (Ele)
BBMP, Bangalore

0	0.00	4	150	600.00	4	600.00	
0	0.00	0	200	0.00	0	0.00	
2	200.00	0	100	0.00	2	200.00	
3	900.00	3	300	900.00	6	1800.00	
9	9000.00	0	1000	0.00	9	9000.00	
6	6000.00	0	1000	0.00	6	6000.00	
5	25000.00	1	5000	5000.00	6	30000.00	
2	4000.00	1	2000	2000.00	3	6000.00	
6	9000.00	2	1500	3000.00	8	12000.00	
6	3600.00	2	600	1200.00	8	4800.00	
2	90000.00	0	45000	0.00	2	90000.00	
	1356505.00			**465345.00**		**1821850.00**	
				5000.00		5000.00	
				960.00		960.00	
	1356505.00			**459385.00**		**1815890.00**	